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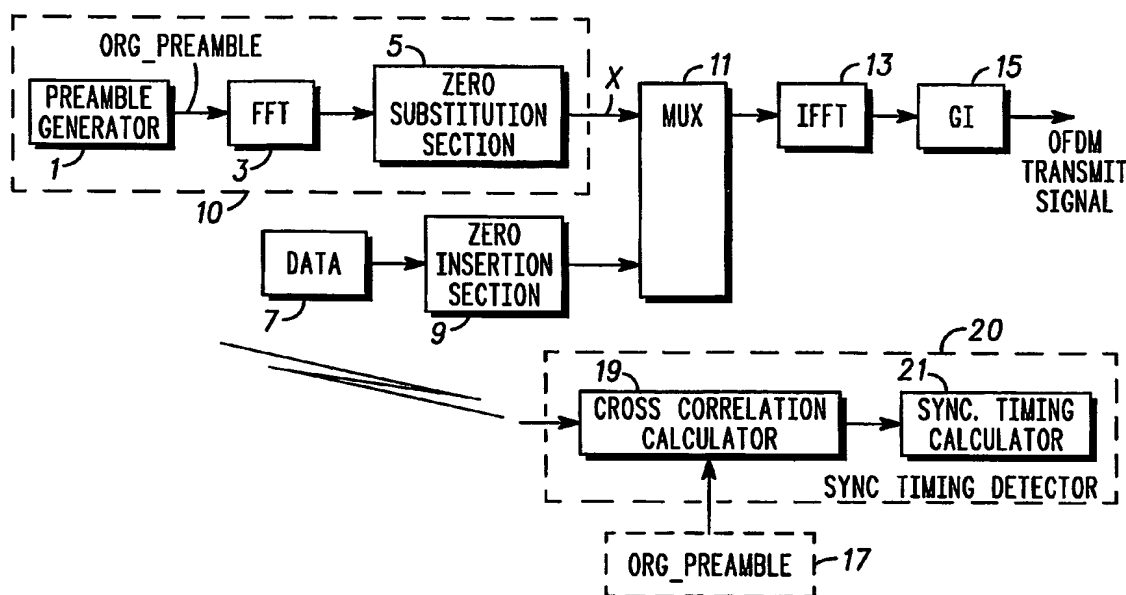
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(54) Title: OFDM COMMUNICATION DEVICE



(57) Abstract: To provide high-quality communication even when the power for synchronization preamble is reduced in an OFDM communication device. To achieve symbol synchronization, an OFDM communication device obtains a zero amplitude reduced preamble signal by passing a specified synchronization preamble through an ideal low-pass filter to reduce a signal component near zero amplitude within a time domain, and time-multiplexes the obtained zero amplitude reduced preamble signal with transmit data to generate an OFDM transmit signal. A receiver section of the OFDM communication device determines the cross correlation between a receive signal and a specified synchronization preamble, which is patterned the same as the counterpart in a transmitter section of the OFDM communication device, and detects a synchronization position in accordance with the determined cross correlation.

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